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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,485	09/02/2003	Makoto Okada	21.1886C	2320

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EXAMINER

CAO, DIEM K

ART UNIT

PAPER NUMBER

2194

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/652,485	Applicant(s) OKADA ET AL.	
	Examiner Diem K. Cao	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7 are pending. Applicant has amended claims 1-6 and added claim 7.

Claim Objections

2. Claims 2-6 are objected to because of the following informalities: preamble of claim 2 is unclear. Applicant could replace the preamble with "A computer readable storage medium embodying a computer program which, when executed, causes a computer to perform a process comprising".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitations "whereby objects receive the messages" on page 4, line 1 (Amendment), and "when messages so transmitted from the objects are received" on page 4, line 4, these two limitations are conflicted. Examiner interprets as "objects receive the messages" for examining purpose.

Claim 7 suffers the same problem.

Correction is required.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Omum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-7 are rejected under the judicially created doctrine of obviousness -type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6,622,143. Although the conflicting claims are not identical, they are not patentably distinct from each other. In particular, a first computer/ a second computer is met by at each computer, first set of reactions / second set of reactions is met by the reaction table of claims 1 and 12; shared communication path is met by common communication path of claim 5; operation types and parameter are met respectively by

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types and parameters of claims 2, 18, for example. Patent 6,622,143 further teaches storing in each computer predetermined information for detecting the predetermined information of the transmitted messages, and executable program to run a reaction.

The rejection is maintained.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 2, 4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cobbaert et al (Pub. No. 2003/0079046).**

Regarding claims 1-7, it is noted that broadly as disclosed, a reaction is an operation in response to information. See application as filed, [0002].

9. As to claim 1, Cobbaert teaches a method (communication mechanism employing continuations), comprising:

- storing a first set of reactions of a first program (methods/functions 131, B2 of program object B / program object Mary), wherein each reaction in the first set comprises indicia of one of a plurality of operations available for performance (methods/functions B1, B2 are defined for and performed by program object B when invoked) ([0033], [0036]-[0040]), and execution information (argument, [0051]) associated with each identified operation;

- a second set of reactions of a second program (methods/functions of further program object), wherein each reaction in the second set comprises indicia of one of a plurality of operations available for performance [it is noted that the further program includes a third program (page 4, claims 3, 4), thus similar to the operation of program A or program Mary, such methods/functions are performed by the further program object when invoked] and execution information (argument) associated with each identified operation;

- performing one or more operations (method/function A1 of program object A) of a first plurality of operations available for performance (methods/functions A1, A2 of program object A, [0034], fig. 3);

- in response to the performing one or more operations, generating a transmission (SEND message, including continuation id and type) comprising indicia of the one or more performed operations (function get age) and information operated on (age of object Mary) by each of the one or more operations;

- receiving the transmission at the first and the second programs (deliver message to the further program which includes first program and third program) (0036, fig. 5);

- at the first program, determining whether the received indicia corresponds to at least one of the first set of reactions (determine which continuation, [0007], [0018]), and if it does, performing an execution using the associated execution information (age parameter) of the one of the first set of reactions (execute function Mary_reply-age) ([0049]-[0052]); and

- at the second program, determining whether the received indicia corresponds to at least one of the second set of reactions, and if it does, performing an execution using the associated execution information of the one of the second set of reactions [it is noted that the further

program includes a third program (page 4, claims 3, 4), and thus operations on a third/different program similar to those of program A would have been inherent/obvious].

Cobbaert does not teach the first/second set of reactions of the first/second programs are stored at first/second computers, nor the one or more operations are performed at a third computer. However, Cobbaert teaches the programs reside in different execution environments ([0003]). It is known that different execution environments are typically implemented by different computers/platforms. Such examples may be found in a heterogeneous network.

Therefore, it would have been obvious to implement the different execution environments by different computers in Cobbaert, i.e., to locate first/second programs on first/second computers and perform the one or more operations at a third computer.

10. As to claim 2, Cobbaert teaches:

- executing original operations (program object A) of different operation types (typed continuatiion) (methods/functions A1, A2 of program object A, [0034], fig. 3);
- when original operations are executed, transmitting messages (message SEND) on a communication path (fig. 3) whereby the objects (program object Mary, further program) receive the messages, where the messages have a format (format specified by SEND message, fig. 5).shared by the objects, and where each message indicates the operation type of its corresponding executed operation (continuation type, [0036]); and
- when messages so transmitted from the objects are received, determining whether to react to each message based on each message's indicated operation type (determine which continuation, [0007], [0018]), and when determined to react to a given message, reacting by

executing a reaction operation (execute function Mary__reply_age) ([0049]-[0052]) that is pre-associated with the message's indicated operation type (type 'AGE'), where each object has its own set of reaction operations (method sfunctions defined for program object Mary) and associations between its reaction operations and at least some of the operation types (determine via continuation type).

While Cobbaert does not explicitly teach the associations are pre-registered, Cobbaert teaches the associations are pre-defined via constructors of messages (figs. 3, 5 and denoting text) and class definitions ([0037], [0039], [0041]-[0044]). Class definition is a form of pre-registration (class data structure). Therefore, it would have been obvious to pre-register the associations in Cobbaert.

11. As to claim 4, Cobbaert teaches a message further indicates a parameter (age parameter) of the original operation (function A1 of program object A) that triggered the message, and wherein the reaction operation (function Mary_Reply-Age of program object Mary) triggered by the message uses as its own parameter the parameter included with the message that determined the execution of the reaction operation (type 'age', [0036]-[0047]).

12. As to claim 7, see rejection of claim 2 above.

13. **Claims 3, 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cobbaert et al as applied to claim 2 in view of Hao et al (U S Pat. 5,844,553).**

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14. As to claim 3, Hao teaches original operations of graphical user interface (window) events (window events), and types of graphical user interface events (input events such as button, motion, leaving events). Col. 3, lines 48-56; Col. 7, line 66 - col. 8, line 10. Therefore, it would have been obvious to include GUI events of various types into Cobbaert. One of ordinary skill in the art would have been motivated to combine the teachings of Cobbaert and Hao because Hao uses the graphical user interface to provide program observation and control, and which would have provided Cobbaert with a more intuitive user interface.

15. As to claim 5, Cobbaert as modified teaches the communication path comprises a network chat channel (real-time collaboration window sessions, col. 7, lines 5-28).

16. As to claim 6, Cobbaert as modified teaches the objects comprise programs executing on different computer systems (110 as a third computer, 120 and 130 as first and second computers, fig. 2).

Response to Arguments

17. Applicant's arguments filed 9/19/2005 have been fully considered but they are not persuasive.

In the remarks, Applicant argued in substance that (1) Cobbaert is directed to a method for accessing the continuation between one program object and another program object by a type of continuation, while the instant application is directed to a method for providing an enhanced amount of freedom of cooperation between objects connected to a network, wherein the object

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uniquely react to a received transmission at another program object, therefore, it is not necessary to direct the transmission to each object, but only a message in a predetermined format to the network. Applicant concluded that the reference of Cobbaert does not teach the features of claim 1, and (2) Hao is directed to a system for multicasting events to a plurality of applications based on a hierarchical data array, thus, Hao does not teach the features of claim 2.

Examiner respectfully traverses Applicant's arguments:

- As to the points (1) and (2), Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. In the previous Office action, examiner clearly pointed out on the elements of the claims that are taught by Cobbaert, and Applicant did not provides any reasons why the cited passages of the references did not meet the claims language. Thus, the arguments are not persuasive.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 5:30AM - 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

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